Yale University

Department of Epidemiology and Public Health School of Medicine 60 College Street P.O. Box 208034 New Haven, Connecticut 06520-8034



Professor Joshua Lederberg The Rockefeller University New York, Ny 10021-6399

7 May 1997

Dear Joshua,

Thanks for bringing the Arthur article on HLA in SIV to my attention. The S(H)IV genome is small enough and sufficiently well known that this must be a case of the virus picking up a cell specified protein and putting it in its own envelope like, but perhaps more specifically than, influenza virus. Arthur's emphasis is on the putative role of this antigen as a target for virus neutralization. As a practical matter this would seem to have import only for the first input virus, because once it replicates, the virus will take on the antigen of the host it grows in and one would have to immunize against self.

Yesterday's N.Y.Times has an article quoting an as yet unavailable Nature paper by Jack Strominger (4th author on the Arthur paper) that offers another suggestion as to its significance. If the HLA protein on SIV does not carry SIV peptides, it would not activate CD8's but might satisfy NK cells to prevent their attack on infected cells. The Strominger paper deals with CMV and implies that an HLA like gene is carried by the virus, but the same end might be met by HIV if it simply modifies the cell protein.

Yours

Francis 1. Black